REMARKS

The Office Action of January 29, 2008 has been reviewed and the comments therein carefully considered. This application has been amended. Specifically, the limitation which previously appeared in dependent claim 19 has now been incorporated into independent claims 18 and 31 and claim 19 has been cancelled. Further, claim 23 has been amended to clarify what is meant by "unique," as requested in the Office Action. Support for this amendment can be found throughout the specification, claims and drawings as originally filed, such as on lines 7-11 of page 3 of the specification. Thus, no new matter has been added by this amendment. Consequently, claims 18 and 20-33 are currently pending.

Rejection Under 35 U.S.C. § 112, second paragraph:

Claim 23 stands rejected under 35 U.S.C. § 112, second paragraph for indefiniteness. Specifically, the phrase "unique manner" has been objected to as vague and indefinite. In response, Applicants have amended this claim to eliminate the word "unique" and clarify that the disrupting means is adapted to disrupt the energy field in a manner that distinguishes it from other disrupting means in the system. Applicants believe this claim, in its current state, is sufficiently definite within the meaning of 35 U.S.C. § 112, second paragraph.

Rejections Under 35 U.S.C. § 103(a)

Claims 18, 20-26 and 28-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lastinger et al. (hereinafter "Lastinger") (U.S. Patent No. 6,552,661) in further view of Horwitz et al. (hereinafter "Horwitz") (U.S. Patent No. 6,617,962). Additionally, claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lastinger in view of Horwitz and in further view of Hartmann (U.S. Publication No. 2003/0142691). Finally, claim 27 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lastinger in view of Horwitz and in further view of Orenstein et al. (hereinafter "Orenstein") (U.S. Patent No. 5,976,038). Applicants respectfully traverse each of these rejections.

Lastinger is directed to a zone-based identification system that uses radio frequencies to determine whether a specific object is located within a certain zone. The system includes a receiver and a plurality of identification devices which are attached to

different objects within the system. As admitted in the Office Action, Lastinger does not teach or suggest using pulse beams having multiple pulse streams oriented substantially parallel to one another.

Horwitz is directed to a reader for a radio-frequency identification (RFID) system that is capable of simultaneously reading multiple tags operating at different frequencies. The reader includes a different module for each of the available frequencies. Each of the modules receives a return signal from a corresponding RFID tag and converts the signal into a pulse signal which can be interpreted and analyzed by the reader. Horwitz is cited in the Office Action as teaching at least two pulse streams which are oriented parallel to one another for the purpose of providing the reader with multi-frequency capacity. However, as stated in the Office Action, Horwitz, whether alone or in combination with Lastinger, fails to teach or suggest the use of pulse beams comprising nine pulse streams which are oriented substantially parallel to one another.

Hartmann is directed to a propagated signal using multiple pulses distributed among multiple time slots for transferring larger amounts of digital data at a faster rate. Hartmann is cited in the Office Action for his discussion, in paragraphs 28-29 thereof, of a pulse beam that contains nine pulse streams for the benefit of creating as many as 35,750 different data states. However, the time slots described by Hartmann take place consecutively in time. Further, each time slot comprises a maximum of one pulse. Therefore, because of the arrangement of the pulses within the time slots, the pulses also occur consecutively in time and space rather than parallel or even substantially parallel in time.

Orenstein is directed to an apparatus for detecting whether an object, and specifically a playing ball, has crossed a determinative line. The apparatus includes an antenna with a first and second antenna pattern and a ball outfitted with a transmitter which emits a signal that is received by the antenna. The transmitter can be disposed in the ball or be composed of a reflective coating which illuminates the ball with energy which is then reflected toward the antenna. The Office Action relies on Orenstein solely for the disclosure of this reflective coating.

Contrary to the teachings of the cited art, claim 18 is directed to a localization system comprising a means for generating an energy field which is adapted to transmit pulse beams comprising nine pulse streams which are oriented substantially parallel to one another.

Similarly, claim 31 is directed to a method for localizing objects or animals including the step of generating an energy field formed by one or more pulse beams, where each pulse beam comprises nine pulse streams oriented at least substantially parallel to each other. Applicants have unexpectedly discovered that by dividing the pulse signal into a plurality of parallel pulse streams, and particularly nine pulse streams, the pulse streams do not have to closely follow one another to increase the data transfer speed. (See Specification, page 3, lines 3-13). This arrangement also enhances the reliability of the system, allows for less expensive detention means to be used and eliminates the need for error correction systems. (Id.)

The unique features of Applicants invention, and particularly the limitation that the pulse beams are split into nine pulse streams which are oriented at least substantially parallel to one another, is not taught or suggested in the cited art. Particularly, the combination of Lastinger and Horwitz fails to teach this arrangement for the reasons discussed herein, which are consistent with the statements regarding the deficiencies of these references set forth in the Office Action. Hartmann, while discussing a system with nine pulses, teaches that these pulses are oriented consecutively with respect to one another, which is distinguishable from Applicants' invention where the multiple pulse streams are disposed at least substantially parallel to one another. In fact, Hartmann teaches away from such a parallel orientation. Orenstein also fails to cure this deficiency with Lastinger, Horwitz and Hartmann.

Consequently, the teachings of the cited references, whether taken alone or in combination, are insufficient to render obvious Applicants' claims, as now presented. Applicants thus submit that the claims are patentable over these references.

Double Patenting

Finally, claims 18, 19 and 23-32 stand provisionally rejected under a non-statutory obviousness-type double patenting rejection based on co-pending Application No. 10/552,549.

Applicants submit herewith a Terminal Disclaimer over Application No. 10/552,549, which obviates this double patenting rejection.

CONCLUSION

For all of the foregoing reasons, Applicants submit that pending claims 18 and 20-33 are patentable over the cited documents and are in condition for allowance. Accordingly, reconsideration of the rejections and allowance of pending claims 18 and 20-33 are respectfully requested.

Respectfully submitted,

THE WEBB LAW FIRM

By _____

John W. McIlvaine
Registration No. 34,219
Attorney for Applicants
436 Seventh Avenue
700 Koppers Building
Pittsburgh, PA 15219
Telephone: (412) 471-8815
Facsimile: (412) 471-4094
E-mail: webblaw@webblaw.com